

*ENVIRONMENTAL OVERVIEW RESPONSE LETTERS*



# ARIZONA DEPARTMENT OF TRANSPORTATION

## TRANSPORTATION PLANNING DIVISION

206 South Seventeenth Avenue Phoenix, Arizona 85007-3213



FIFE SYMINGTON  
Governor

July 22, 1994

HARRY A. REED  
Division Director

LARRY S. BONINE  
Director

REC'D JUL 27 1994

Ms. Sue L. Haddix  
Armstrong Consultants, Inc.  
861 Rood Avenue  
Grand Junction, Colorado 81501

Dear Ms. Haddix:

The Arizona Department of Transportation and the City of Douglas are working to realign SR80 in the City of Douglas. The new alignment is parallel to the Old Southern Pacific Railroad switching yard, see enclosed map.

Once the new roadway is constructed, the old SR80 Highway will be abandoned to the City of Douglas.

The City of Douglas is developing a new roadway through the old Phelps Dodge property. The new roadway is named Chino Road. The City of Douglas should be contacted for additional information.

Sincerely,

Dell Beesley, Manager  
Priority Programming

Enclosure

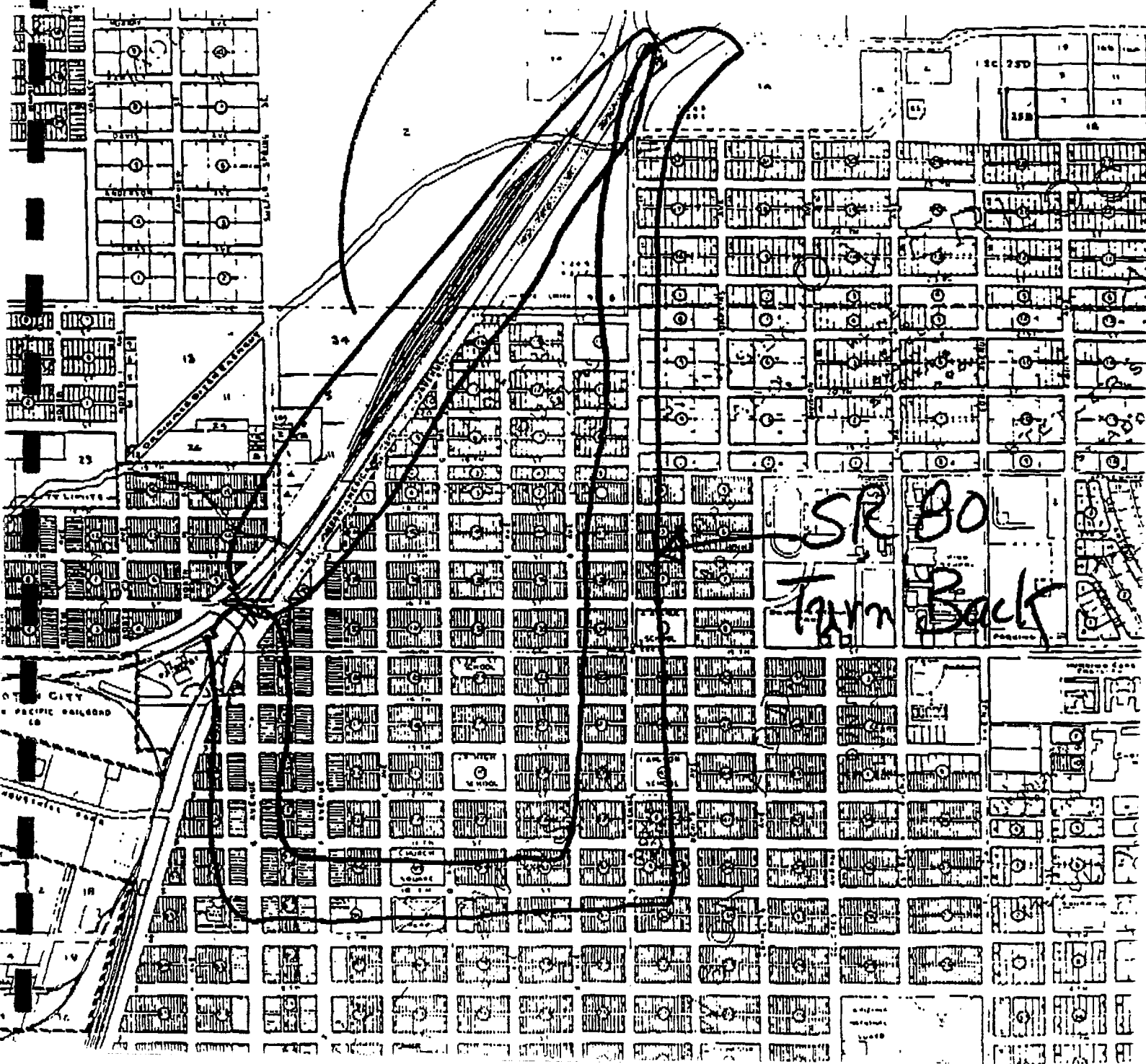
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To <i>Sue Haddix</i>	From <i>Dell Bensley</i>
Co. <i>Armstrong Consultants</i>	Co. <i>ADOT</i>
Dept.	Phone # <i>255-782</i>
Fax #	Fax #

*Study Route*





REC'D AUG 05 1994

## ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Fife Symington, Governor      Edward Z. Fox, Director

Nonpoint Source Unit, 5th Floor  
1-800-234-5677 (Arizona Only)  
FAX (602) 207-4467  
(602) 207-4535

July 28, 1994

Ms. Sue L. Haddix  
Airport Planner  
Armstrong Consultants, Inc.  
861 Rood Avenue  
Grand Junction, Colorado 81501

Re:      **Airport Master Plan Study and Environmental Overview for the Douglas Municipal Airport, Your Letter 6-27-94**

Dear Ms. Haddix:

The Arizona Department of Environmental Quality, Division of Water Quality, Nonpoint Source Unit (NPS), appreciates the opportunity to comment on the Airport Master Plan Study and Environmental Overview for the Douglas Municipal Airport.

The Arizona Department of Environmental Quality recommends that:

1.      Where applicable the Management Agency and or Owner/Operator shall over-site any construction to ensure that discharges from the watershed or to all Waters of the State/Waters of the U.S. shall meet all applicable Water Quality Standards;
2.      Best Management Practices should be implemented during and after all construction phases to protect watershed condition and riparian areas, to maintain adequate vegetative cover, and to minimize the discharge of sediment, petroleum, nutrients, bacteria and other pollutants to the watershed or to all Waters of the State/Waters of the U.S.;
3.      Best Management Practices should be implemented for construction activities for mechanical equipment to minimize ground disturbance to protect watershed condition and riparian areas.
4.      A monitoring program should be implemented to evaluate the effectiveness of Best Management Practices in protecting watershed condition and Waters of the State;
5.      Where applicable the Management Agency and or Owner/Operator shall demonstrate a knowledge of waste streams, permits and hazardous materials handling as well as indicate the destination of each hazardous waste being disposed off-site;
6.      All solid wastes generated by the activity shall be transported to an ADEQ approved facility. Waste stored on site for more than 90 days, or will be treated or disposed of on-site, may require facility approval. Contact Ms. Mercedes Vidan at (602) 207-4117 with the Arizona Department

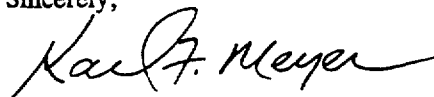
Sue L. Haddix  
July 28, 1994  
Page 2

of Environmental Quality, Solid Waste Plan Review Unit, regarding assistance in applying for this permit;

7. Sanitary waste facilities provided during construction phases shall be planned and developed in such a manner to ensure protection of both surface and groundwater resources;
8. As of October 1, 1992, a Clean Water Act, Section 402, NPDES Permit is required for all ground disturbing activities which exceed 5 acres in impact. Contact Mr. Robert Wilson at (602) 207-4574 with the Arizona Department of Environmental Quality regarding assistance in applying for this federal permit;
9. A Clean Water Act, Section 404 Permit may be required for the discharge of dredged or fill material into the navigable waters. Contact Ms. Cindy Lester of the US Army Corp of Engineers at (602) 640-5385 regarding a 404 Permit application. In addition a Section 401 Certification may be required and can be obtained from ADEQ. Contact Mr. Jim Matt at (602) 207-4502 with the Arizona Department of Environmental Quality, Engineering Review and Permits, for assistance in obtaining certification; and
10. A.A.C. R18-11-109, Surface Water Quality Standards Rules must be complied with as set forth in Section G (enclosed).

Enclosed for your information and reference, please find a copy of A.A.C. R18-11-107/108/109, Surface Water Standards Rules. The Arizona Department of Environmental Quality would appreciate receiving information on the progress of this project. Thank you for your cooperation, should you have any questions, please contact me at (602) 207-4535.

Sincerely,



Karl F. Meyer  
Nonpoint Source Unit

Enclosures

cc: Pat Mariella, ADEQ  
Larry Stephenson, ADEQ  
Mike Hill, ADEQ  
Kris Randall, ADEQ  
Peter Jagow, ADEQ  
Dan Salzler, ADEQ

- G. In designating uses of a navigable water and in establishing water quality criteria to protect those designated uses, the Director shall take into consideration the applicable water quality standards for downstream navigable waters and shall ensure that the water quality standards provide for the attainment and maintenance of the water quality standards of downstream navigable waters.
- H. A use attainability analysis shall be conducted prior to removal of a designated use or adoption of a subcategory of a designated use that requires less stringent water quality criteria.
- I. The Director may remove a designated use or adopt a subcategory of a designated use that requires less stringent water quality criteria provided the designated use is not an existing use and it is demonstrated through a use attainability analysis that attaining the designated use is not feasible for any of the following reasons:
1. Naturally occurring pollutant concentrations prevent the attainment of the use;
  2. Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of a sufficient volume of treated wastewater without violating water conservation or other applicable requirements.
- Nothing herein shall be construed to require releases of

R18-11-105. Reserved

R18-11-106. Reserved

R18-11-107. Antidegradation

- A. The determination of whether there is any degradation of water quality in a navigable water shall be on a pollutant-by-pollutant basis.
- B. The level of water quality necessary to protect existing uses shall be maintained and protected. No degradation of existing water quality is permitted in a navigable water where the existing water quality does not meet applicable water quality standards.
- C. Where existing water quality in a navigable water is better than applicable water quality standards, the existing water quality shall be maintained and protected. The Director may allow limited degradation of existing water quality in such navigable waters, except unique waters, provided that the Department has held a public hearing on whether degradation should be allowed pursuant to the general public hearing procedures prescribed at R18-1-401 and R18-1-402 and the Director makes all of the following findings:
1. The level of water quality necessary to protect existing uses is fully protected.
  2. The highest statutory and regulatory requirements for all new and existing point sources as set forth in the Clean Water Act are achieved.
  3. All cost-effective and reasonable best management practices for nonpoint source control are implemented.
  4. Allowing lower water quality is necessary to accommodate important economic or social development in the area in which the navigable water is located.
- D. Existing water quality shall be maintained and protected in a navigable water that is classified as a unique water or that the Director has proposed for classification as a unique water pursuant to A.A.C. R18-11-112. The Director shall not allow limited degradation of a unique water pursuant to subsection (C) of this Section.
- E. Nothing in this Section or in the implementation of this Section shall be inconsistent with § 316 of the Clean Water Act where a potential water quality impairment associated with a thermal discharge is involved.

#### Historical Note

Adopted effective February 18, 1992 (Supp. 92-1).

treated wastewater;

3. Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place;
4. Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the navigable water to its original condition or to operate such modification in a way that would result in attainment of the use. Nothing herein shall be construed to require the releases of water from dams;
5. Physical conditions related to the natural features of the navigable water, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life designated uses; or
6. Controls more stringent than those required by §§ 301(b) and 306 of the Clean Water Act are necessary to attain the use and implementation of such controls would result in substantial and widespread economic and social impact.

#### Historical Note

Adopted effective February 18, 1992 (Supp. 92-1).

R18-11-108. Narrative water quality standards

- A. Navigable waters shall be free from pollutants in amounts or combinations that:
1. Settle to form bottom deposits that inhibit or prohibit the habitation, growth or propagation of aquatic life or that impair recreational uses;
  2. Cause objectionable odor in the area in which the navigable water is located;
  3. Cause off-taste or odor in drinking water;
  4. Cause off-flavor in aquatic organisms or waterfowl;
  5. Are toxic to humans, animals, plants or other organisms;
  6. Cause the growth of algae or aquatic plants that inhibit or prohibit the habitation, growth or propagation of other aquatic life or that impair recreational uses;
  7. Cause or contribute to a violation of an aquifer water quality standard prescribed in A.A.C. R18-11-405 or R18-11-406; or
  8. Change the color of the navigable water from natural background levels of color.
- B. Navigable waters shall be free from oil, grease and other pollutants that float as debris, foam, or scum; or that cause a film or iridescent appearance on the surface of the water, or that cause a deposit on a shoreline, bank or aquatic vegetation. The discharge of lubricating oil or gasoline associated with the normal operation of a recreational watercraft shall not be considered a violation of this narrative standard.

#### Historical Note

Adopted effective February 18, 1992 (Supp. 92-1).

R18-11-109. Numeric water quality standards

- A. The water quality standards prescribed in this Section and in Appendix A apply to navigable waters listed in Appendix B and their tributaries. Additional numeric water quality standards for unique waters are prescribed in R18-11-112.
- B. The following water quality standards for fecal coliform, expressed in colony forming units per 100 milliliters of water (cfu/100 ml), shall not be exceeded:

## Department of Environmental Quality – Water Quality Boundaries and Standards

1. <u>Fecal Coliform</u>	<u>FBC</u>	<u>DWS, PBC, A&amp;W<sup>1</sup></u>	<u>AgI, AgI</u>
30-day geometric mean (5 sample minimum)	200	1000	
10% of samples for a 30-day period	400	2000	
Single sample maximum	800	4000	
2. <u>Fecal coliform in effluent dominated waters</u>		<u>All designated uses</u>	
30-day geometric mean (5 sample minimum)		200	
10% of samples for a 30-day period		400	
Single sample maximum		800	
C. The following water quality standards for pH, expressed in standard units, shall not be violated:			
pH	<u>DWS</u>	<u>FBC, PBC, A&amp;W<sup>2</sup></u>	<u>AgI</u>
Maximum	9.0	9.0	9.0
Minimum	5.0	6.5	4.5
Maximum change due to discharge	NNS	0.5	NNS
D. The following maximum allowable increase in ambient water temperature, expressed in degrees Celsius, shall not be exceeded:			
<u>Temperature<sup>3</sup></u>		<u>A&amp;Ww, A&amp;Wedw</u>	<u>A&amp;Wc</u>
Maximum increase due to a discharge <sup>4,5</sup>		3.0	1.0
E. The following water quality standards for turbidity, expressed as a maximum concentration in nephelometric turbidity units (NTU), shall not be exceeded:			
<u>Turbidity</u>	<u>FBC, PBC, A&amp;Ww, A&amp;Wedw</u>		<u>A&amp;Wc</u>
Rivers, streams and other flowing waters	50		10
Lakes, reservoirs, tanks and ponds	25		10
F. The following are the water quality standards for dissolved oxygen, expressed in milligrams per liter (mg/L). The dissolved oxygen concentration in a navigable water shall not fall below the following minimum concentrations:			
<u>Dissolved oxygen<sup>6</sup></u>	<u>A&amp;Ww</u>	<u>A&amp;Wc</u>	<u>A&amp;Wedw</u>
Single sample minimum <sup>7,8</sup>	6.0	7.0	1.0
G. The following water quality standards for total phosphorus and total nitrogen, expressed in milligrams per liter (mg/L), shall not be exceeded:			
	<u>Annual mean</u>	<u>90th percentile</u>	<u>Single Sample Maximum</u>
Verde River and its tributaries from headwaters to Bartlett Lake			
Total phosphorus	0.10	0.30	1.00
Total nitrogen	1.00	1.50	3.00
White River, Black River, Tonto Creek and their tributaries			
Total phosphorus	0.10	0.20	0.80
Total nitrogen	0.50	1.00	2.00
Salt River and its tributaries, except Pinal Creek, from the confluence of the White and Black Rivers to Theodore Roosevelt Lake			
Total phosphorus	0.12	0.30	1.00
Total nitrogen	0.60	1.20	2.00
Theodore Roosevelt, Apache, Canyon and Saguaro Lakes			
Total phosphorus	0.03 <sup>a</sup>	NNS	0.60 <sup>b</sup>
Total nitrogen	0.30 <sup>a</sup>	NNS	1.00 <sup>b</sup>
Salt River below Stewart Mountain Dam to confluence with the Verde River			
Total phosphorus	0.05	NNS	0.20
Total nitrogen	0.60	NNS	3.00
Little Colorado River and its tributaries above River Reservoir in Greer, South Fork of Little Colorado River above South Fork Campground; Water Canyon Creek above Apache-Sitgreaves National Forest boundary			
Total phosphorus	0.08	0.10	0.75
Total nitrogen	0.60	0.75	1.10
Little Colorado River at crossing of Apache County Road No. 124			
Total phosphorus	NNS	NNS	0.75
Total nitrogen	NNS	NNS	1.80
Little Colorado River above Lyman Lake to above Amity Ditch diversion near crossing of Arizona Highway 273 (applies only when in-stream turbidity is less than 50 NTU)			
Total phosphorus	0.20	0.30	0.75
Total nitrogen	0.70	1.20	1.50

Colorado River, at Northern International Boundary near Morelos Dam			
Total phosphorus	NNS	0.33	NNS
Total nitrogen	NNS	2.50	NNS
San Pedro River, from Curtiss to Benson			
- Total phosphorus	NNS	NNS	NNS
Total nitrate as N	NNS	NNS	10.0

H. The following water quality standards for radiochemicals shall not be exceeded:

1. In all navigable waters, the concentration of radiochemicals shall not exceed the limits established by the Arizona Radiation Regulatory Agency in Title 12, Chapter 1, Article 4, Appendix A, Table II, Column 2 of the Arizona Administrative Code, (effective June 30, 1977, and no future amendments), which is incorporated by reference and on file with the Office of the Secretary of State and with the Department.
2. In navigable waters that are designated as domestic water sources, the following water quality standards for radiochemicals shall not be exceeded:
  - a. The concentration of gross alpha particle activity, including radium-226 but excluding radon and uranium, shall not exceed 15 picocuries per liter of water.
  - b. The concentration of combined radium-226 and radium-228 shall not exceed 5 picocuries per liter of water.
  - c. The concentration of strontium-90 shall not exceed 8 picocuries per liter of water.
  - d. The concentration of tritium shall not exceed 20,000 picocuries per liter of water.
  - e. The average annual concentration of beta particle activity and photon emitters from man-made radionuclides shall not produce an annual dose equivalent to the total body or any internal organ greater than 4 millirems per year.

Footnotes:

- 1 Includes A&Wc, A&Ww and A&We.
  - 2 Includes A&Wc, A&Ww, A&Wedw and A&We.
  - 3 There is no water quality standard for temperature for the A&We designated use.
  - 4 Does not apply to Cholla Lake.
  - 5 Does not apply to a wastewater treatment plant discharge to a dry watercourse that creates an effluent dominated water.
  - 6 There is no dissolved oxygen standard for the A&We designated use.
  - 7 Or 90% saturation, whichever is less.
  - 8 The dissolved oxygen water quality standard for a lake shall apply below the surface but not at a depth greater than 1 meter.
  - a means annual mean of representative composite samples taken from the surface and at 2- and 5-meter depths.
  - b means maximum for any set of representative composite samples taken from the surface and at 2- and 5-meter depths.
- "NNS" means no numeric standard.

Historical Note

Adopted effective February 18, 1992 (Supp. 92-1).

R18-11-110. Salinity of the Colorado River

The flow-weighted average annual salinity in the lower main stem of the Colorado River shall be maintained at or below the following concentrations:

Location	Total Dissolved Solids
Below Hoover Dam	723 mg/L
Below Parker Dam	747 mg/L
At Imperial Dam	879 mg/L

Historical Note

Adopted effective February 18, 1992 (Supp. 92-1).

R18-11-111. Analytical Methods

- A. Analysis of a sample taken to determine compliance with a water quality standard shall be in accordance with an approved analytical method prescribed in Title 9, Chapter 14, Article 6 of the Arizona Administrative Code or an alternative analytical method that is approved by the Director of the Department of Health Services pursuant to A.A.C. R9-14-607(B).
- B. A test result from a sample taken to determine compliance with a water quality standard shall be valid only if the sample has been analyzed by a laboratory that is licensed by the Arizona Department of Health Services for the analysis performed.

Historical Note

Adopted effective February 18, 1992 (Supp. 92-1).

R18-11-112. Unique waters

- A. The classification of a navigable water as a unique water shall be by rule.
- B. The Director may adopt, by rule, site-specific water quality standards to maintain and protect existing water quality in a unique water.
- C. Any person may nominate a navigable water for classification as a unique water by filing a petition for rule adoption with the Department. A petition for rule adoption to classify a navigable water as a unique water shall include:
  1. A map and a description of the navigable water.
  2. A written statement in support of the nomination, including specific reference to the applicable criteria for unique waters classification as prescribed in subsection (D) of this Section;
  3. Supporting evidence demonstrating that one or more of the applicable unique waters criteria prescribed in subsection (D) of this Section has been met; and
  4. Relevant water quality data.
- D. A navigable water may be classified as a unique water by the Director upon a finding that the navigable water is an outstanding state resource water based upon one of the following criteria:
  1. The navigable water is of exceptional recreational or ecological significance because of its unique attributes, including, but not limited to, attributes related to the geology, flora, fauna, water quality, aesthetic values or the wilderness characteristics of the navigable water.
  2. Threatened or endangered species are known to be associated with the navigable water and the existing water quality is essential to the maintenance and propagation of a threatened or endangered species or the navigable water provides critical habitat for a threatened or endangered species. Endangered or threatened species are identified on the following lists which are hereby incorporated by reference and on file with the Office of the Secretary of State and with the Department:
    - a. Endangered and Threatened Wildlife and Plants, 50 CFR 17.11 and 17.12 (revised as of July 15, 1991);
    - b. "Threatened Native Wildlife of Arizona," Arizona Game and Fish Department (July 21, 1988);





## ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Fife Symington, Governor Edward Z. Fox, Director

August 19, 1994

Ms. Sue L. Haddix  
Armstrong Consultants, Inc.  
861 Rood Avenue  
Grand Junction, CO 81501

RE: Douglas Municipal Airport

Dear Ms. Haddix:

We have concluded our review of the referenced project relative to water quality impacts. Thank you for the opportunity to review your proposal during initial project planning. Since we have not been on site as a part of this review, our comments are limited to those which could be ascertained from the information you provide, our files and other available data sources. Detailed comments will be presented when additional information concerning potential impacts to water quality is received. Our general comments follow:

Those activities resulting in alterations of the natural environment should not cause or contribute to the exceedance of limits found in the Water Quality Standards for Navigable Waters, A.A.C. Title 18, Chapter 11, Article 1. Enclosed is a copy of the response form to show how your project will incorporate the Water Quality Control Council (WQCC) Policies for Construction and Related Activities in Watercourses, Adopted April 13, 1977. Please fill out the form for those activities pertinent to your proposed project. When you forward the completed form to me, it will be reviewed to determine if there are any potential violations of the Federal Clean Water Act or State Environmental Quality Act. I would like completed response form No. 404.003 to become a part of the environmental report to document environmental protection practices to be used for this airport expansion project.

Numeric and narrative water quality standards rules have been adopted for aquifers and navigable waters and are found in the Arizona Administrative Code (A.A.C.), Title 18, Chapter 11. The referenced project is subject to these and other rules and requirements for environmental protection which are administered by local, State and Federal agencies. State 401 Water Quality Certification is required for all CWA permits issued except for Pre-Certified Nationwide Permits which are administered by the U.S. Army Corps of Engineers.

Permits or approvals may be required by the county health department, Arizona Department of Environmental Quality (ADEQ), Arizona Department of Water Resources, U.S. Army Corps of Engineers

or the U.S. Environmental Protection Agency if the overall project includes construction within a watercourse or a potable water supply, wastewater reuse facilities, or wastewater collection/holding/treatment/disposal facilities, or stormwater facilities, or a dam.

We recommend that the environmental analyses reports include a comparison of "Waters of the United States" (WUS) impact areas for each alternative. These areas should include the WUS that are either lost or sustain impaired functions and values (physical, biological or chemical) as a result of any activities regulated by CWA §404. If you are unable to easily delineate WUS, we recommend that the comparison be made for impact areas within the 100-year floodplain.

Runoff and seepage from roadways, embankments, and other alterations of the natural environment must not cause a violation of A.A.C. Title 18, Chapter 11, Article 1.

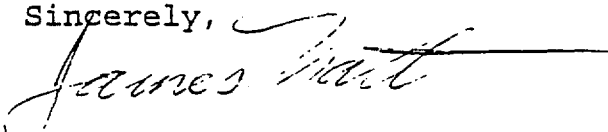
All off-site material sources for the project must have valid and current permits under the Federal Clean Water Act [Sections 402 (NPDES) and 404 (Dredge and Fill)] and the State Aquifer Protection Program, where necessary. Facilities and activities not covered by individual permits under these programs are not exempt from the duty to comply with water quality standards for surface waters and aquifers, and will be subject to compliance action if violation is documented. Other permits pertaining to air quality may be required for material sources and are the responsibility of the applicant or his agent(s).

Water for dust suppression, if used, must not contain contaminants that could violate water quality standards for surface waters or aquifers.

If culverts are used they should be adequately sized to handle the expected flow and properly set with the ends protected from erosion. Stormwater discharges should be managed to minimize the pollution of the waters of the State. Drainage from paved areas should not result in direct discharge to canals or environmentally sensitive waters.

If you have any questions, please call me at 207-4502. Thank you for your cooperation and efforts to protect our natural environment.

Sincerely,



James Matt, P.E.  
Certification Engineer

Enclosure: 1

JRM\A:#10\DOUGLAS.AIR

**APPLICANT'S RESPONSE TO ARIZONA WATER QUALITY CONTROL COUNCIL  
POLICY FOR CONSTRUCTION AND RELATED ACTIVITIES IN WATER, ADOPTED  
APRIL 13, 1977.**

Prepared by: \_\_\_\_\_

Date: \_\_\_\_\_

U. S. Army Corps of Engineers Public Notice Number \_\_\_\_\_

For each policy, please describe the procedures, practices and/or facilities that will (a) minimize potential pollution of surface waters and (b) demonstrate compliance with State water quality standards (A.A.C. Title 18, Chapter 11, Articles 1, 2 and 3). Please note that the waters of the State include all watercourses, and perennial or intermittent streams (A.R.S. §49-201.31).

**POLICY (1)** Provision for temporary pollution control measures including dikes, basins, ditches and application of straw and seed.

**POLICY (2)** Erosion control measures including minimizing clearing and grubbing and limiting exposure of erodible surface to 750,000 square feet for each location.

**POLICY (3)** Construction of footings in water by sheet pile cofferdam method and pumping water from within the dam to settling ponds before returning it to the water.

**POLICY (4)** Isolation of the construction area by sand dikes.

**POLICY (5)** Erection of barriers, covers, shields and other protective devices as necessary to prevent any construction materials, equipment or contaminants from falling or being thrown into the water.

POLICY (6) Construction of drainage facilities to control erosion and sedimentation.

POLICY (7) Provision of an adequate means, such as a bypass channel, to carry a stream free from mud and silt around operations to remove material from beneath a flowing stream.

POLICY (8) A requirement for transportation of materials across live streams to be conducted without muddying the stream. Mechanized equipment should not be operated in stream channels of live streams except as may be necessary to construct crossings or barriers and fills at channel changes.

**POLICY (9)** A requirement for wash water from aggregate washing--or--other--operations--containing mud or silt to be treated by filtration or retention in a settling pond, or ponds, adequate to prevent muddy water from entering live streams.

**POLICY (10)** A requirement for oily or greasy substances originating from the contractor's operations not be placed where they will later enter a live stream.

**POLICY (11)** Provisions for Portland cement or fresh Portland cement concrete not be allowed to enter flowing water of streams.

**POLICY (12)** A requirement to return the flow of streams as nearly as possible to a meandering thread without creating a possible future bank erosion problem when operations are completed.

**POLICY (13)** A requirement that material derived from roadway work should not be deposited in a live stream channel where it could be washed away by high stream flows.

**POLICY (OTHER POLLUTANTS)** A requirement that plans and procedures be prepared for facilities and activities within a watercourse to protect water from pollution with fuels, oil, bitumens, calcium chloride and other harmful materials.

**POLICY (MONITORING)** The person responsible for the activity should be required to monitor for turbidity every day in which there is a disturbance of the bed of the waterway. Monitoring should be performed not greater than 1.5 miles downstream from the construction or related operations, and may be required at different frequencies and for other parameters to demonstrate compliance with water quality standards.

**ADDITIONAL INFORMATION**





IN REPLY REFER TO:

## United States Department of the Interior

NATIONAL PARK SERVICE  
Southern Arizona Group  
202 E. Earll Drive Suite 115  
Phoenix, Arizona 85012-2623

L7621

July 11, 1994

Sue L. Haddix, Airport Planner  
Armstrong Consultants, Inc.  
861 Rood Avenue  
Grand Junction, Colorado 81501

RE: Douglas Municipal Airport  
Environmental Overview

Dear Ms. Haddix:

Thank you for your letter of June 27, 1994. We appreciate the opportunity to comment on the proposed development projects for Douglas Municipal Airport. From the information you provided, it does not appear that the airport construction proposed would affect National Parks Service lands. If there is more information available in the future, we would be pleased to review it.

Sincerely,

R. Clay Cunningham  
General Superintendent



## ARIZONA STATE PARKS

1300 W. WASHINGTON  
PHOENIX, ARIZONA 85007  
TELEPHONE 602-542-4174

FIFE SYMINGTON  
GOVERNOR

### STATE PARKS BOARD MEMBERS

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KENNETH E. TRAVOUS  
EXECUTIVE DIRECTOR

CHARLES R. EATHERLY  
DEPUTY DIRECTOR

July 6, 1994

Sue L. Haddix, Airport Planner  
Armstrong Consultants, Inc.  
861 Rood Avenue  
Grand Junction, Colorado 81501

Dear Sue:

This letter is to follow up our conversation earlier today in which I stated that Kenneth Travous (Arizona State Parks) has no comments on the Douglas Municipal Airport Environmental Overview. In addition, there are no plans for a state park in that area.

Sincerely,

Pat Dutrack, Administrative Assistant  
FOR  
Kenneth E. Travous  
Executive Director



REC'D AUG 15 1994

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
FISH AND WILDLIFE SERVICE  
ARIZONA ECOLOGICAL SERVICES STATE OFFICE  
3616 West Thomas Road, Suite 6  
Phoenix, Arizona 85019**



Telephone: (602) 379-4720 FAX: (602) 379-6629  
August 3, 1994

In Reply Refer To:  
AESO/ES  
2-21-94-I-442

Ms. Sue L. Haddix  
Armstrong Consultants, Inc.  
861 Rood Avenue  
Grand Junction, Colorado 81501

Dear Ms. Haddix:

This letter is in response to your June 27, 1994, request for information on listed or proposed threatened or endangered species and candidate species that may occur in the area of Section 16, Township 24 South, Range 28 East, Douglas Municipal Airport, Cochise County, Arizona, for a proposed runway extension and construction of a replacement crosswind runway.

Our data indicate the following listed and candidate species may occur in the proposed project area:

Endangered

Lesser long-nosed bat (*Leptonycteris curasoae yerbabuenae*)  
American peregrine falcon (*Falco peregrinus anatum*)

Candidate Category 2

California leaf-nosed bat (*Macrotus californicus*)  
Mexican long-tongued bat (*Choeronycteris mexicana*)  
Chiricahua western harvest mouse (*Reithrodontomys megalotis arizonensis*)  
Yellow-nosed cotton rat (*Sigmodon ochrognathus*)  
Loggerhead shrike (*Lanius ludovicianus*)  
Ferruginous hawk (*Buteo regalis*) (wintering)  
Texas horned lizard (*Phrynosoma cornutum*)

Endangered and threatened species are protected by Federal law and must be considered prior to project development. Candidate species are those which the Fish and Wildlife Service (Service) is considering adding to the threatened or endangered species list. Category 1 candidates are those for which the Service has enough information to support a proposal to list. Category 2 species are those for which the Service presently has insufficient information to support a proposal to list. Although candidate species have no legal protection under the Endangered Species Act, they should be considered in the planning process in the event they become listed or proposed for listing prior to project completion.

The State of Arizona protects some species not protected by Federal law. We suggest you contact the Arizona Game and Fish Department and the Arizona Department of Agriculture for state-listed or sensitive species in the project area.

We appreciate your efforts to identify and avoid impacts to listed and sensitive species in your project area. In future communications on this project, please refer to consultation number 2-21-94-I-442. If we may be of further assistance, please contact Brenda Andrews or Tom Gatz.

Sincerely,



Sam F. Spiller  
State Supervisor

cc: Director, Arizona Game and Fish Department, Phoenix, Arizona  
Plant Program Manager, Arizona Department of Agriculture, Phoenix, Arizona

THE STATE



OF ARIZONA

## GAME & FISH DEPARTMENT

2221 West Greenway Road, Phoenix, Arizona 85023-4399 (602) 942-3000

555 N. Greasewood Rd., Tucson, AZ 85745 (602) 628-5376

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Michael M. Golightly, Flagstaff  
Herb Guenther, Yuma

Director  
Duane L. Shroufe

Deputy Director  
Thomas W. Spalding

29 August 1994

Ms. Sue L. Haddix  
Airport Planner  
Armstrong Consultants, Inc.  
861 Rood Avenue  
Grand Junction, Colorado 81501

Re: Douglas Municipal Airport Environmental Overview

Dear Ms. Haddix:

The Department has reviewed the above-referenced project for potential impacts to special status species, critical or sensitive habitats, and wildlife resources. We offer the following comments.

Information contained in Region V's special status species database is dynamic and is updated on a periodic basis. Any information, therefore, is likely to become outdated shortly after its release. Such information is intended to serve as a guide regarding what species may be found in a particular area. It does not represent the results of comprehensive species-specific surveys. These comments provide the context from which to evaluate the information provided below.

Current records in the Department's Heritage Data Management System show that the Texas horned lizard (Phrynosoma cornutum) is known to occur in the vicinity of the proposed project site. This lizard is a Category 2 Candidate for listing by the U.S. Fish and Wildlife Service as Threatened or Endangered under authority of the Endangered Species Act. The Texas horned lizard inhabits open and sparsely vegetated desert grassland areas. Bunch grasses, cacti, acacia, and mesquite trees are often used for cover. They are also known to bury themselves in loose soil. This lizard is insectivorous whose diet primarily consists of ants but also takes beetles and grasshoppers. If Texas horned lizard(s) are encountered during the course of airport expansion activities, we recommend that the individual(s) be relocated out of the area of immediate danger. The animal should be released in the closest area of habitat most similar to that in which it was found, preferably in the shade.


We also suggest that the airport perimeter be fenced to reduce the potential conflicts between air traffic and big game species. Mule

Ms. Haddix  
29 August 1994  
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deer and javelina currently frequent the area proposed for runway expansion and may present a safety hazard if they are not discouraged from using runway areas.

If you require additional information or wish to discuss the contents of this letter, please contact me in the Tucson Regional Office at 602/628-5376.

Sincerely,

A handwritten signature in black ink, appearing to read "Sherry A. Ruther", written over the typed name.

Sherry A. Ruther  
Habitat Specialist  
Tucson Regional Office

SAR:sar

cc: Ron Christofferson, Project Evaluation Coordinator  
Chad Donk, District Wildlife Manager



United States  
Department of  
Agriculture

Soil  
Conservation  
Service

Douglas Field Office  
Rt 1 Box 226  
Leslie Canyon Rd.  
Douglas, AZ 85607  
(602)364-20001

File #  
xc: 3  
k

July 18, 1994

Sue L. Haddix, Airport Planner  
Armstrong Consultants, Inc.  
861 Road Avenue  
Grand Junction, CO 81501

Dear Ms. Haddix:

The proposed runway extension and crosswind runway construction at Douglas Municipal Airport does not involve any prime and unique farmland.

Sincerely,

Sonia M. Gasho  
Rangeland Management Specialist



The Soil Conservation Service  
is an agency of the  
United States Department of Agriculture

